

IN THE CLAIMS:

Please cancel claims 13-14, 16-20, 22, 26, 29, 37, and 49-50 without prejudice.

Please amend claims 1-2, 9-31, 33-34, 36-38, 49, and 46 as follows. For the convenience of the Examiner all of the claims under examination, whether or not amended, are presented below.

- B¹
1. **(Amended)** A humanized immunoglobulin having binding specificity for B7-2, said immunoglobulin comprising an antigen binding region of non-human origin and at least a portion of an immunoglobulin of human origin wherein the antigen binding region comprises a heavy chain derived from the I2R antibody or a light chain derived from the H2F antibody.
 2. **(Amended)** The humanized immunoglobulin of Claim 1, wherein the portion of an immunoglobulin of human origin is derived from a human constant region.
 3. The humanized immunoglobulin of Claim 2, wherein the human constant region comprises an IgG constant region.
 4. The humanized immunoglobulin of Claim 3, wherein the human constant region contains a mutation capable of reducing the effector function of the immunoglobulin.
 5. **(Amended)** The humanized immunoglobulin of Claim 4, wherein the human constant region comprises an IgG2 constant region and a Valine amino acid at position 234 of the IgG2 constant region is substituted with Alanine and/or a Glycine amino acid at position 237 of the IgG2 constant region is substituted with Alanine.
 6. The humanized immunoglobulin of Claim 3, wherein the IgG constant region is selected from the group consisting of an IgG4 constant region and an IgG2 constant region.
 7. The humanized immunoglobulin of Claim 1, wherein the antigen binding region is of rodent origin.
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8. The humanized immunoglobulin of Claim 1, wherein the antigen binding region comprises a complementarity determining region of rodent origin, and the portion of an immunoglobulin of human origin is derived from a human framework region.

9. **(Amended)** The humanized immunoglobulin of Claim 8, wherein the complementarity determining region is derived from the 3D1 monoclonal antibody.

10. **(Amended)** The humanized immunoglobulin of claim 9, further comprising a constant region of human origin, wherein the heavy chain comprises a variable region of SEQ ID NO:6 and the light chain comprises a variable region of SEQ ID NO:8.

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11. **(Amended)** The humanized immunoglobulin of any one of Claims 1 or 10, wherein said immunoglobulin can compete with the murine 3D1 antibody for binding to B7-2.

12. **(Amended)** The humanized immunoglobulin of Claim 11, wherein the light and heavy chains each have three complementary determining regions derived from the 3D1 antibody.

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15. **(Amended)** A humanized immunoglobulin having binding specificity for B7-2 which humanized immunoglobulin is derived from the cell line deposited with the ATCC®, Accession No. CRL-12524.

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21. **(Amended)** A humanized immunoglobulin light chain having binding specificity for B7-2 comprising CDR1, CDR2 and CDR3 of the light chain of the murine 3D1 antibody, and a human light chain framework region derived from the light chain of the human H2F antibody.

23. **(Amended)** The humanized immunoglobulin light chain of Claim 21, wherein the light chain comprises a variable region of SEQ ID NO: 8.

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24. **(Amended)** An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

- 5/22/97
a) SEQ ID NO:7,
b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:8,

- Sub 12
- c) the nucleic acid sequence of a nucleic acid molecule which hybridizes to the nucleic acid molecule comprising a nucleotide sequence according to a) or b) under stringent hybridization conditions, and
 - d) a nucleotide sequence which is the complement of the nucleotide sequence according to a) or b).

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25. **(Amended)** A humanized immunoglobulin heavy chain specific for B7-2 comprising CDR1, CDR2 and CDR3 of the heavy chain of the murine 3D1 antibody, and a human heavy chain framework region derived from the heavy chain of the human I2R antibody.

27. **(Amended)** The humanized immunoglobulin heavy chain of Claim 25, wherein the heavy chain comprises a variable region of SEQ ID NO:6.

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28. **(Amended)** An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

- Sub 13
- a) SEQ ID NO: 5,
 - b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:6,
 - c) the nucleotide sequence of a nucleic acid molecule which hybridizes to the nucleic acid molecule comprising a nucleotide sequence according to a) or b) under stringent hybridization conditions, and
 - d) a nucleotide sequence which is the complement of the nucleotide sequence according to a) or b).

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30. **(Amended)** An expression vector comprising a fused gene encoding a humanized immunoglobulin light chain, said gene comprising a nucleotide sequence encoding a CDR derived from a light chain of a nonhuman antibody having binding specificity for B7-2 and a framework region derived from the light chain of the human H2F antibody.

31. **(Amended)** The expression vector of Claim 30, wherein the nonhuman antibody is the murine 3D1 antibody.

32. A host cell comprising the expression vector of Claim 30.

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33. **(Amended)** An expression vector comprising a fused gene encoding a humanized immunoglobulin heavy chain, said gene comprising a nucleotide sequence encoding a CDR

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derived from a heavy chain of a nonhuman antibody having binding specificity for B7-2 and a framework region derived from the heavy chain of the human I2R antibody.

34. **(Amended)** The expression vector of Claim 33, wherein the nonhuman antibody is the murine 3D1 antibody.

35. A host cell comprising the expression vector of Claim 33.

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36. **(Amended)** A host cell comprising at least one nucleic acid molecule encoding the humanized immunoglobulin of Claim 1.

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38. **(Amended)** A method of preparing a humanized immunoglobulin comprising maintaining a host cell of Claim 36 under conditions appropriate for expression of a humanized immunoglobulin, wherein humanized immunoglobulin chains are expressed and a humanized immunoglobulin is produced.

39. The method of Claim 38, further comprising the step of isolating the humanized immunoglobulin.

40. **(Amended)** A fused gene encoding a humanized immunoglobulin light chain comprising:
a) a first nucleic acid molecule encoding an antigen binding region derived from the murine 3D1 monoclonal antibody, comprising a framework region derived from the light chain of the human H2F antibody; and
b) a second nucleic acid sequence encoding at least a portion of a constant region of an immunoglobulin of human origin.

46. **(Amended)** A pharmaceutical composition comprising the antibody of any one of Claims 1 or 10, and a pharmaceutically acceptable carrier.

Please add new claims 64-76 as follows:

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--64. **(NEW)** An expression vector comprising a fused gene encoding a humanized immunoglobulin light chain, said gene comprising the nucleotide sequence of claim 24.

65. (NEW) A host cell comprising the expression vector of claim 64.

66. (NEW) An expression vector comprising a fused gene encoding a humanized immunoglobulin heavy chain, said gene comprising the nucleotide sequence of claim 28.

67. (NEW) A host cell comprising the expression vector of claim 66.

68. (NEW) The humanized immunoglobulin of Claim 10, wherein the human constant region comprises an IgG constant region.

69. (NEW) The humanized immunoglobulin of Claim 68, wherein the human constant region contains a mutation capable of reducing the effector function of the immunoglobulin.

70. (NEW) The humanized immunoglobulin of Claim 69, wherein the human constant region comprises an IgG2 constant region and a Valine amino acid at position 234 of the IgG2 constant regions is substituted with Alanine and/or a Glycine amino acid at position 237 of the IgG constant region is substituted with Alanine.

71. (NEW) The humanized immunoglobulin of Claim 68, wherein the IgG constant region is selected from the group consisting of an IgG4 constant region and an IgG2 constant region.

72. (NEW) A host cell comprising at least one nucleic acid molecule encoding the humanized immunoglobulin of Claim 10.

73. (NEW) A method of preparing a humanized immunoglobulin comprising maintaining a host cell of Claim 72 under conditions appropriate for expression of a humanized immunoglobulin, wherein humanized immunoglobulin chains are expressed and a humanized immunoglobulin is produced.--

74. (NEW) The method of Claim 73, further comprising the step of isolating the humanized immunoglobulin.

✓ 75. (NEW) A fused gene encoding a humanized immunoglobulin heavy chain comprising: